

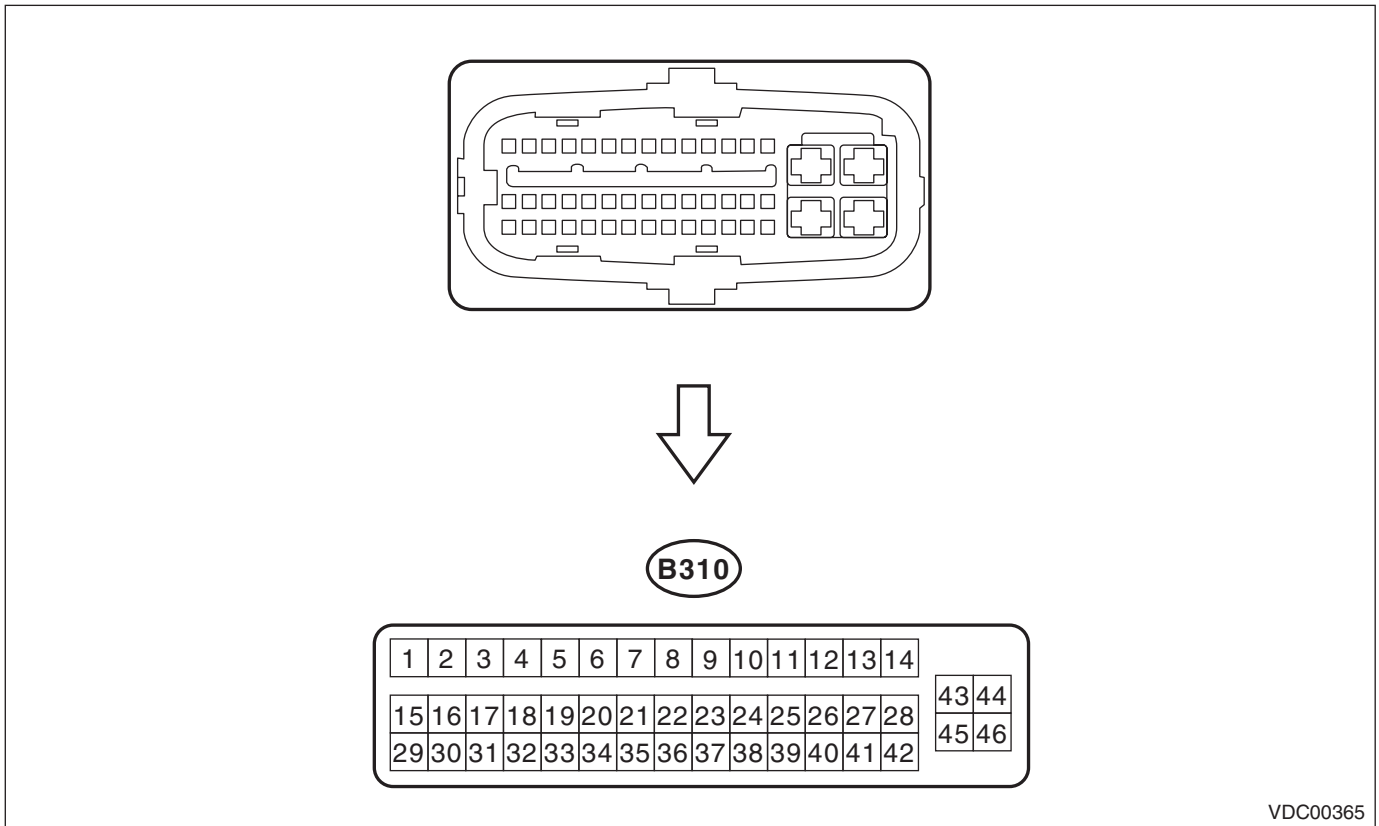
Control Module I/O Signal

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

5. Control Module I/O Signal

A: ELECTRICAL SPECIFICATION

1. VDC CONTROL MODULE IDENTIFICATION MARK W2



NOTE:

- Terminal numbers in VDCCM&H/U connector are shown in the figure.
- When the connector is removed from VDCCM&H/U, the ABS warning light, EBD warning light, VDC warning light and TCS OFF indicator light illuminate.

Control Module I/O Signal

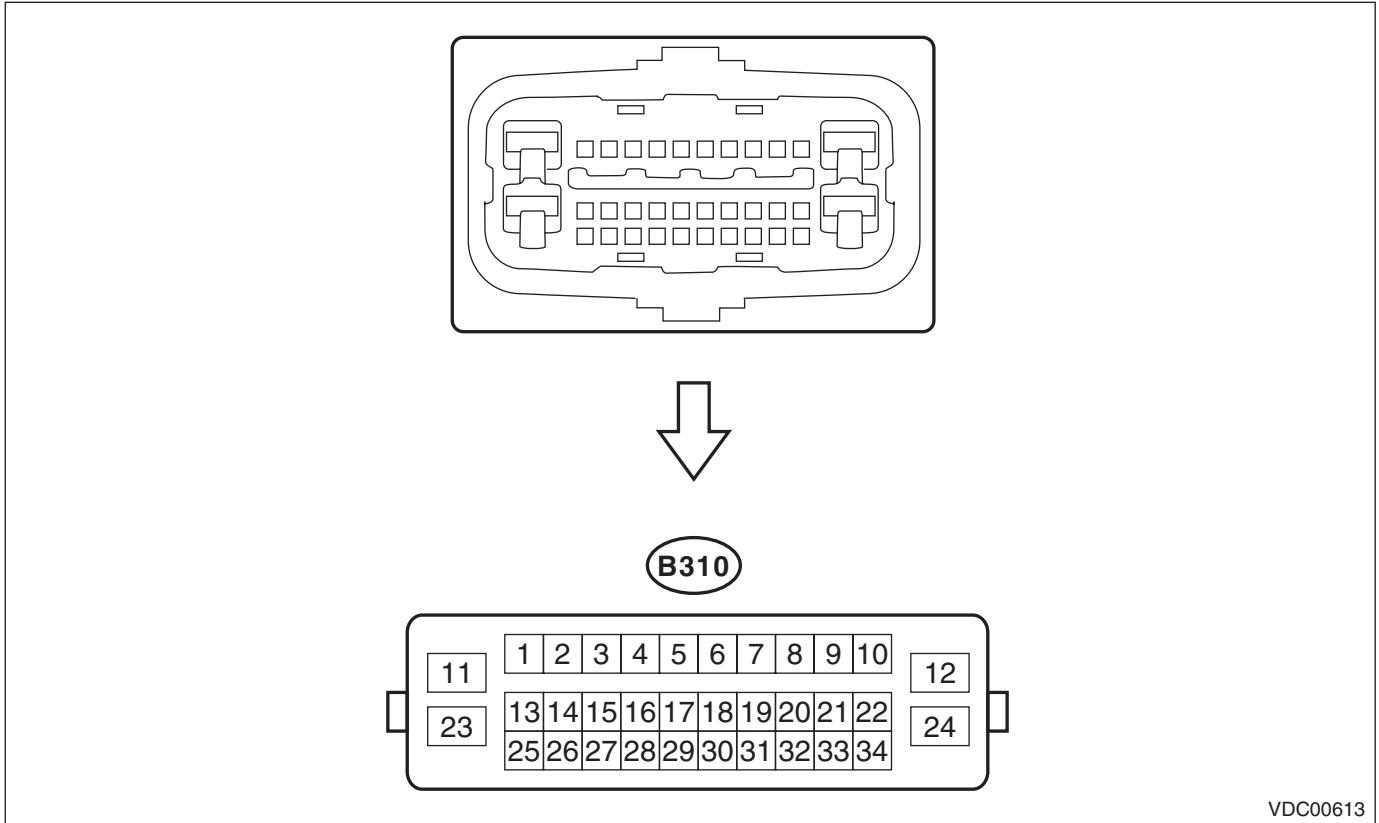
VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

Description			Terminal No. (+) — (–)	Input/Output signal
				Measured value and measuring conditions
Power supply			1 — 43	10 — 15 V when the ignition switch is ON.
ABS wheel speed sensor	Front LH wheel	Power supply	27 — 43	8 — 15 V
		Signal	41	5 — 17 mA: Rectangle waveform
	Front RH wheel	Power supply	42 — 43	8 — 15 V
		Signal	28	5 — 17 mA: Rectangle waveform
	Rear LH wheel	Power supply	25 — 43	8 — 15 V
		Signal	39	5 — 17 mA: Rectangle waveform
	Rear RH wheel	Power supply	40 — 43	8 — 15 V
		Signal	26	5 — 17 mA: Rectangle waveform
Yaw rate & lateral G sensor			34 — 20	Serial communication
Steering angle sensor				
CAN communication line (+)			34	Serial communication
CAN communication line (–)			20	Serial communication
Valve relay power supply			44 — 43	10 — 15 V always.
Motor power supply			45 — 46	10 — 15 V when the motor is ON.
ABS warning light			16 — 43	After turning the ignition switch to ON, 10 — 15 V during 1.5 seconds and less than 1.5 V after 1.5 seconds passed.
Brake warning light (EBD warning light)			3 — 43	After turning the ignition switch to ON, 10 — 15 V during 1.5 seconds and less than 1.5 V after 1.5 seconds passed.
Stop light switch			18 — 43	Less than 1.5 V when the stop light is OFF; otherwise, 10 — 15 V when the stop light is ON.
Subaru Select Monitor			32 — 43	0 ↔ 12 V pulse (in communication)
Vehicle speed output signal			33	Model without vehicle speed dependent wiper: 0 ↔ 5 V pulse Model without vehicle speed dependent wiper: 0 ↔ 12 V pulse
Ground			43	—
Relay box	Relay power supply		2 — 43	10 — 15 V when the ignition switch is ON.
	Motor relay drive		30 — 43	After turning the ignition switch to ON: 10 — 15 V, during the motor is operating: 1.5 V.
	Fail safe relay drive		31 — 43	When the ignition switch is ON, less than 1.5 V.

Control Module I/O Signal

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

2. VDC CONTROL MODULE IDENTIFICATION MARK W3



NOTE:

- Terminal numbers in VDCCM&H/U connector are shown in the figure.
- When the connector is removed from VDCCM&H/U, the ABS warning light, EBD warning light, VDC warning light and TCS OFF indicator light illuminate.

Control Module I/O Signal

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

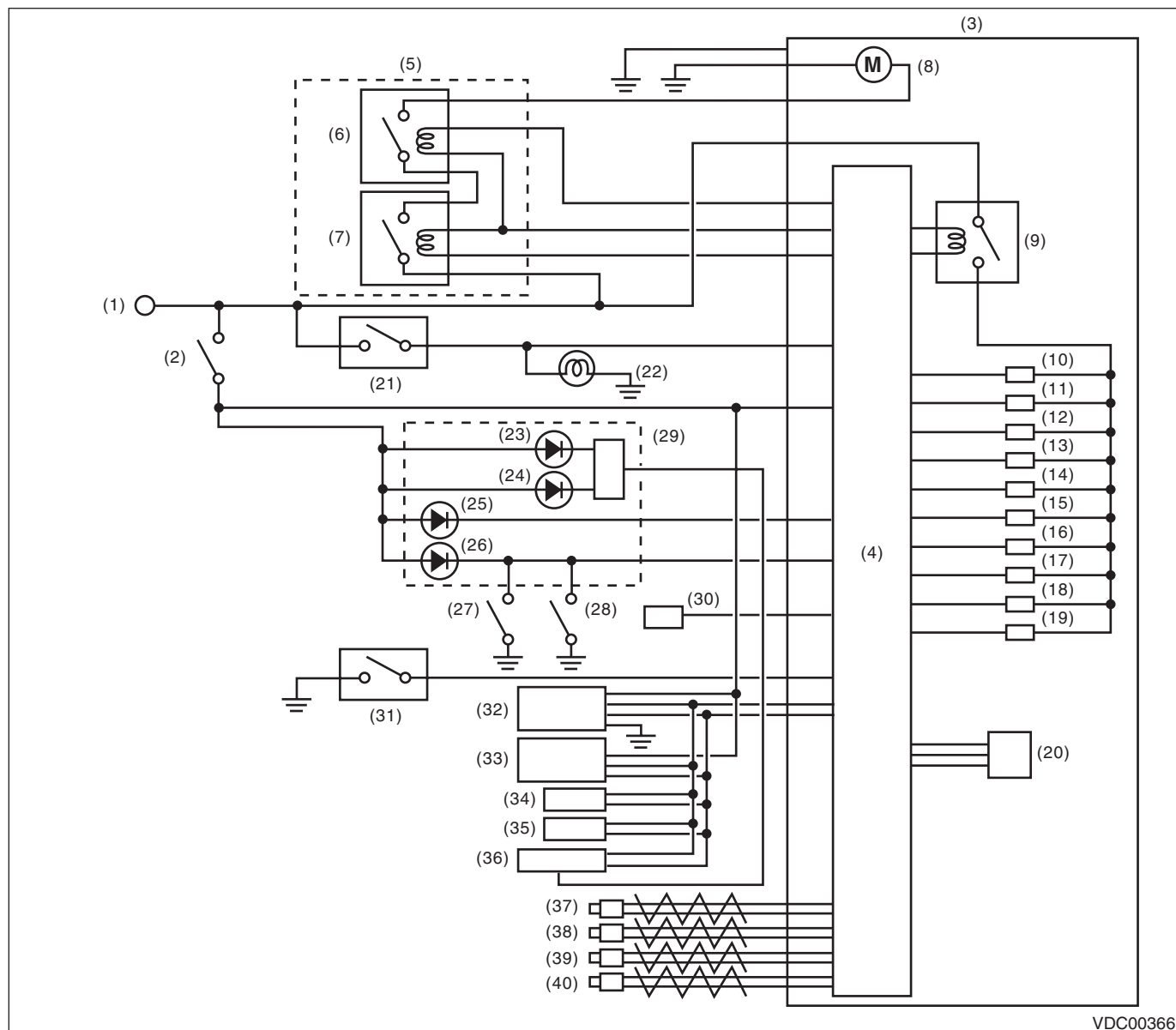
Description			Terminal No. (+) — (–)	Input/Output signal
				Measured value and measuring conditions
Power supply			34 — 11	10 — 15 V when the ignition switch is ON.
ABS wheel speed sensor	Front LH wheel	Power supply	18 — 11	8 — 15 V
		Signal	17	5 — 17 mA: Rectangle waveform
	Front RH wheel	Power supply	6 — 11	8 — 15 V
		Signal	5	5 — 17 mA: Rectangle waveform
	Rear LH wheel	Power supply	4 — 11	8 — 15 V
		Signal	3	5 — 17 mA: Rectangle waveform
	Rear RH wheel	Power supply	16 — 11	8 — 15 V
		Signal	15	5 — 17 mA: Rectangle waveform
Yaw rate & lateral G sensor			25 — 13	Serial communication
Steering angle sensor				
CAN communication line (+)			25	Serial communication
CAN communication line (–)			13	Serial communication
Valve relay power supply			12 — 11	10 — 15 V always.
Motor power supply			24 — 23	10 — 15 V when the motor is ON.
ABS warning light			8 — 11	After turning the ignition switch to ON, 10 — 15 V during 1.5 seconds and less than 1.5 V after 1.5 seconds passed.
Brake warning light (EBD warning light)			7 — 11	After turning the ignition switch to ON, 10 — 15 V during 1.5 seconds and less than 1.5 V after 1.5 seconds passed.
Stop light switch			1 — 11	Less than 1.5 V when the stop light is OFF; otherwise, 10 — 15 V when the stop light is ON.
Subaru Select Monitor			19 — 11	0 ↔ 12 V pulse (in communication)
Vehicle speed output signal			10	Model without vehicle speed dependent wiper: 0 ↔ 5 V pulse Model without vehicle speed dependent wiper: 0 ↔ 12 V pulse
Ground			11	—

Control Module I/O Signal

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

B: WIRING DIAGRAM

1. VDC CONTROL MODULE IDENTIFICATION MARK W2



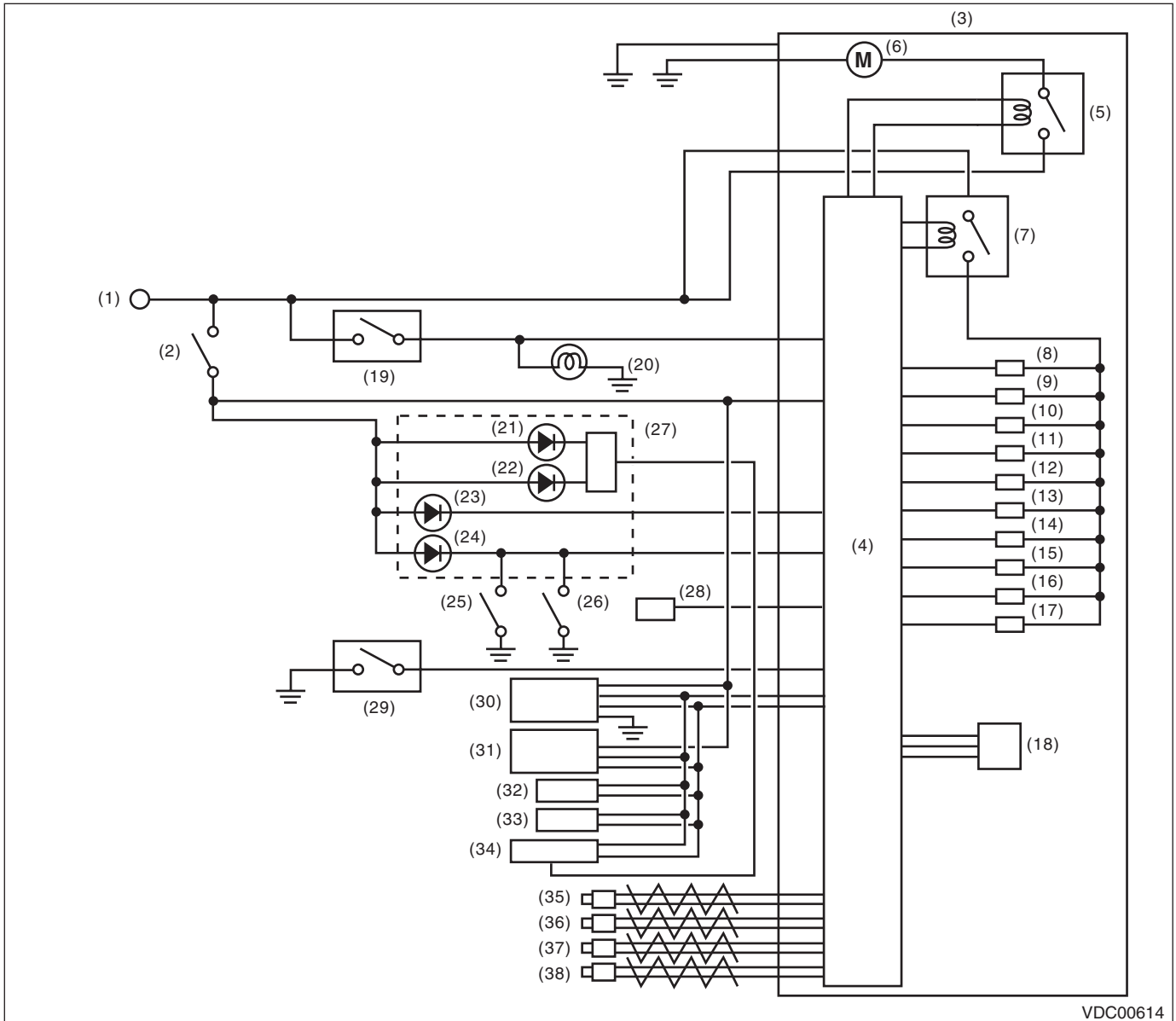
VDC00366

- | | | |
|---|--|--|
| (1) Battery | (14) Rear inlet solenoid valve LH | (27) Parking brake switch |
| (2) Ignition switch | (15) Rear outlet solenoid valve LH | (28) Brake fluid level switch |
| (3) VDC control module & hydraulic control unit (VDCCM&H/U) | (16) Rear inlet solenoid valve RH | (29) Combination meter |
| (4) VDC control module | (17) Rear outlet solenoid valve RH | (30) Data link connector |
| (5) Relay box | (18) Linear valve 1 | (31) TCS OFF switch |
| (6) Motor relay | (19) Linear valve 2 | (32) Steering angle sensor |
| (7) Fail safe relay | (20) Pressure sensor | (33) Yaw rate & lateral G sensor |
| (8) Motor | (21) Stop light switch | (34) Transmission control module (TCM) |
| (9) Valve relay | (22) Stop light | (35) Engine control module (ECM) |
| (10) Front inlet solenoid valve LH | (23) VDC indicator light | (36) Body integrated unit |
| (11) Front outlet solenoid valve LH | (24) VDC warning light and TCS OFF indicator light | (37) Front ABS wheel speed sensor LH |
| (12) Front inlet solenoid valve RH | (25) ABS warning light | (38) Front ABS wheel speed sensor RH |
| (13) Front outlet solenoid valve RH | (26) Brake warning light | (39) Rear ABS wheel speed sensor LH |
| | | (40) Rear ABS wheel speed sensor RH |

Control Module I/O Signal

VEHICLE DYNAMICS CONTROL (VDC) (DIAGNOSTICS)

2. VDC CONTROL MODULE IDENTIFICATION MARK W3



VDC00614

- | | | |
|---|--|--|
| (1) Battery | (14) Rear inlet solenoid valve RH | (26) Brake fluid level switch |
| (2) Ignition switch | (15) Rear outlet solenoid valve RH | (27) Combination meter |
| (3) VDC control module & hydraulic control unit (VDCCM&H/U) | (16) Linear valve 1 | (28) Data link connector |
| (4) VDC control module | (17) Linear valve 2 | (29) TCS OFF switch |
| (5) Motor relay | (18) Pressure sensor | (30) Steering angle sensor |
| (6) Motor | (19) Stop light switch | (31) Yaw rate & lateral G sensor |
| (7) Valve relay | (20) Stop light | (32) Transmission control module (TCM) |
| (8) Front inlet solenoid valve LH | (21) VDC indicator light | (33) Engine control module (ECM) |
| (9) Front outlet solenoid valve LH | (22) VDC warning light and TCS OFF indicator light | (34) Body integrated unit |
| (10) Front inlet solenoid valve RH | (23) ABS warning light | (35) Front ABS wheel speed sensor LH |
| (11) Front outlet solenoid valve RH | (24) Brake warning light | (36) Front ABS wheel speed sensor RH |
| (12) Rear inlet solenoid valve LH | (25) Parking brake switch | (37) Rear ABS wheel speed sensor LH |
| (13) Rear outlet solenoid valve LH | | (38) Rear ABS wheel speed sensor RH |